

United States Senate

WASHINGTON, DC 20510-2102

March 2, 2012

The Honorable Daniel Inouye
Chairman
Senate Appropriations Committee
122 Dirksen Senate Office Building
Washington, D.C. 20510

The Honorable Thad Cochran
Vice Chairman
Senate Appropriations Committee
122 Dirksen Senate Office Building
Washington, D.C. 20510

The Honorable Dianne Feinstein
Chairman
Committee on Appropriations
Subcommittee on Energy and
Water Development
142 Dirksen Senate Office Building
Washington, D.C. 20510

The Honorable Lamar Alexander
Ranking Member
Committee on Appropriations
Subcommittee on Energy and
Water Development
188 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Inouye, Vice Chairman Cochran, Chairman Feinstein and Ranking Member Alexander:

I am writing you today to express my serious concerns about the funding included in President Obama's FY 2013 budget request for United States domestic fusion program and the effect it could have on our economy in the future. I request that you provide \$300 million for domestic fusion research and \$150 million for the international ITER project for fusion research program in the Senate FY 2013 Energy and Water Appropriations bill.

The United States has been an international leader in fusion energy research for generations. A critical part of that research has been done since 1976 at Massachusetts Institute of Technology's (MIT) Plasma Science and Fusion Center (PSFC) which is recognized as one of the leading university research laboratories in the physics and engineering aspects of magnetic and inertial fusion. The PSFC has focused on developing a basic understanding of plasma behavior in the laboratory and in nature. This research has led to practical applications which in the long term could solve the future energy needs of our nation and the world.

As Chairman of the Foreign Relations Committee, I fully understand the importance and potential benefits of the participation of the United States in international research projects, including ITER. However I also do believe that an appropriate balance must be struck between domestic and international considerations of our research investments. The investment and funding of international research projects makes little sense if it encourages future jobs to leave this country and be sent abroad while at the same time resulting in significant cuts to the jobs that these fields currently support here at home.

Unfortunately, the President's Fiscal Year 2013 budget proposal for the Department of Energy (DOE) fails to meet that important test by including a 16 percent reduction in domestic fusion

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research to just \$248 million. At the same time, the President's budget proposal included a 43 percent increase for the international fusion research project (ITER) to \$150 million.


If the President's request is enacted into law, the C-Mod research facility at MIT will be abruptly terminated and 130 fusion scientists, engineers, graduate students, and support personnel at MIT would be terminated. The domestic fusion program simply cannot withstand the proposed reductions without a severe negative impact to our fusion research and our scientific contributions to ITER.

To remain at the cutting edge, United States fusion researchers must participate in the international ITER being built in Cadarache, France. But to pay for ITER—which aims to produce a self-sustaining fusion reaction, or "burning plasma," and prove that fusion is a viable energy source—the United States is sacrificing the very community of researchers who would apply the results from the ITER experiments. This shortsighted approach could eliminate the ability of the United States to take a lead role in developing the next generation of energy research.

As the Energy and Water Appropriations Subcommittee begins the process of looking at funding allocations for DOE in FY 2013. I hope you will continue to invest in fusion projects and research that supports American jobs now and in the future and that you will provide \$300 million for domestic fusion research.

Thank you in advance for your consideration of my request.

Sincerely,



John F. Kerry